

(For BLM Use)

Serial Number 85-sm-8

Date Received 5-29-85

NOTICE

OR

PLAN OF OPERATIONS

m/o 49/005

(For Operations Proposed Under the 43 CFR 3809 Regulations)

Instructions to Claimant/Operator: Circle "Notice" above if operations within the project area propose to disturb a total of five (5) acres or less during the calendar year. Circle "Plan of Operations" if the proposed disturbance will exceed five (5) acres during the calendar year or if your operations are proposed in an area listed in 3809.1-4(b). Complete the form in as much detail as possible. Use maps or sketches where appropriate (maps or sketches are required for submitted plans of operations and are recommended, but not required, for submitted notices). A review of 43 CFR 3809 Regulations should be conducted prior to completion of this form and submission to the appropriate BLM office.

Claimant Information:

<u>Name</u>	<u>Mailing Address</u>	<u>Telephone</u>
Interstate Brick Co.	9780 South 5200 West West Jordan, UT 84084	801-561-1471

Operator Information: (If different than claimant)

<u>Name</u>	<u>Mailing Address</u>	<u>Telephone</u>
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Claim Information: (If activities are proposed on BLM administered lands where no claims have been located, describe the area by Township, Range, and Section).

<u>Claim Name</u>	<u>BLM Serial #</u>	<u>Claim Type (Lode, Millsite, etc.)</u>
CLAY RESEARCH #2	UMC 175080	LODE
CLAY RESEARCH #4	UMC 175081	LODE
CLAY RESEARCH #5	UMC 175082	LODE
CLAY RESEARCH #6	UMC 175083	LODE
JACK RABBIT	UMC 175089	LODE

Proposed Operations: Describe the entire proposed operation, including all surface disturbing activities (road construction, drilling, trenching, backhoe and bulldozer exploration, mining, waste disposal, etc.). List all mechanized earth moving equipment to be used during the operation and state if any explosives are to be utilized. Describe and furnish a map or sketch, when applicable, showing existing surface disturbances, structures, facilities, etc., and the location and size of areas where surface disturbances are proposed, including existing and/or proposed routes of access. Calculate the total acreage proposed for disturbance (1 AC. = 43,560 sq. ft.).

Date Operations are Proposed to Commence as Outlined in this Submittal - (Month, Day, Year):

August, 1985. Exact day has not yet been established.

Access Routes (Existing and Proposed)

Existing highway.

Existing Disturbance and Structures

Mining from previous years. No structures.

Proposed Operations

Removal of mined and stockpiled material by front end loader and truck.

Mining activities occurred on the claims in October and November 1984

Proposed Completion Date

September 1, 1985.

Proposed Reclamation: Describe the proposed reclamation procedures and other measures to be taken to prevent unnecessary or undue degradation of the lands, including measures to be taken if a period of non-operation is anticipated.

Keep areas picked up--Seeding of vegetation will not be done as the material will be coming from a stockpile.

I hereby declare that I, or persons I have authorized to do so, will complete all necessary reclamation of areas disturbed during the course of my operations to the standards described in 43 CFR 3809.1-3(d) and that reasonable measures will be taken to prevent unnecessary or undue degradation of the federal lands during operations.

Ronald H. Baldwin
Signature of Claimant or Operator

March 14, 1985
Date

Notice to Claimants/Operators:

1. A notice submitted in relation to the 43 CFR 3809 regulations does not require approval from the BLM. However, notification of such activities shall be made at least 15 days before commencing operations. Approval of a submitted plan of operations is required from the BLM prior to commencing operations. The BLM will promptly acknowledge receipt of a plan and will notify the claimant/operator of the status of the plan within 30 days of receipt.
2. Approval of a plan of operations does not constitute certification of ownership to any person named as claimant/operator herein, nor does approval constitute recognition of the validity of any mining claims named herein.
3. Information and data submitted and specifically identified by the operator as containing trade secrets or confidential or privileged commercial or financial information should be attached to a separate page and cited in the text of the notice or plan of operations. This information will be filed separately by the BLM and will not be available for public inspection.
4. Failure of an operator to file a notice under 3809.1-3 or a plan of operations under 3809.1-4 will subject the operator, at the discretion of the authorized officer, to being served a notice of non-compliance or enjoined from the continuation of such operations by a court order until such time as a plan or notice is filed with the authorized officer.



General Offices & Plant
9780 South 5200 West
West Jordan, Utah 84084
801/561-1471

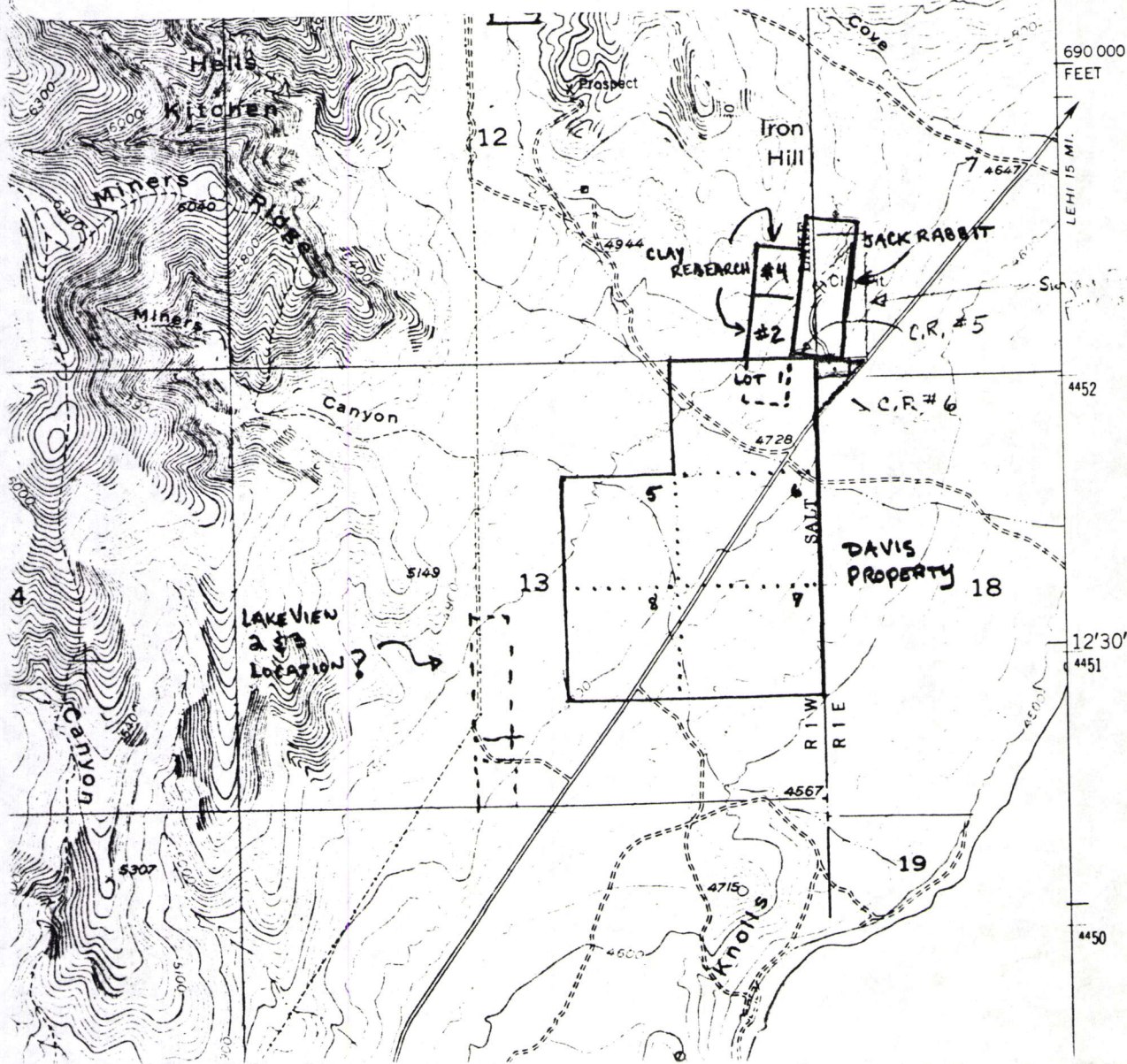
T. 6 S.
T. 7 S.

4455

5

Clay Research and Jack Rabbit

T. 7 S. R. 1 E. + 1 W.



Soilders Pass Clay - Clay Placer Claims

This clay deposit is located in the foothills east of Cedar Valley and appears to dip to the east. According to Mr. Baldwin the disturbance size is 4 and 1/2 acres. An independent size estimation could be made to determine if the 5 acre threshold whereby a plan of operation is required has been exceeded. This clay is deep red to purple in color and may be an altered tertiary volcanic. This clay exhibits the following properties: low refractory (pyrometric cone equivalent value 6), acid resistance and difficult grinding during brick making (a vitrified deposit). Total removal at this site is 3000-4000 tons/year. Close inspection revealed the presence of a few non-clay stringers within the clay deposit. These stringers may be limestone deposited during one of the many tertiary lacustrine intervals. According to Mr. Baldwin there is a low probability for patent application at this site. Directly south of these claims is another small pit. The clay in this pit is Halloysite $Al_2Si_2O_5(OH)_4 \cdot 2H_2O$ (a hydrated relative of kaolinite). Problems with halloysite during brick making include differential shrinkage during heating (possibly due to dehydration). This deposit was mined by the Filtrol corporation and was used as a catalyst in oil refining. Mining of this deposit has ceased due to the advent of higher quality synthetic zeolites. This halloysite deposit appears to be on state ground.

5 mile pass area - patented claims-sterling, lucky boy, unpatented claims-placer clay reserve, little elbow

The five mile pass area is confusing because of the profusion of historic disturbances created by a variety of different operators. Numerous roads, pads, spoil piles and pit excavations are present. According to Mr. Baldwin, there is one major pit on private patented ground where the company has been and will continue clay mining. The clay at this pit is overlain by limestone and colluvial and alluvial gravel overburden. Removal of this limestone and gravel has created some steep highwalls. The clay mined at 5 mile pass is predominantly illite. Illite is a field term used to describe mica in soils, sediments and sedimentary rocks. Illites are intermediate in composition and structure between muscovite and montmorillonite with no substantial expanding lattice characteristics. The general formula is: $(H_3O, K)_y (Al_4, Fe_4, Mg_4, Mg_6) (Si_{18-y}, Al_y) O_{20} (OH)_4$, with y less than 2 and frequently 1 to 1.5. Mr. Baldwin stated that the clay at 5 mile pass exhibits an unusual particle size analysis. The clay layer at this pit appears 25-30 feet thick and appears to dip 15-20 degrees west. According to Mr. Baldwin no recent mining has occurred at this second pit. Some adjacent properties at 5 mile pass are owned by Interpace corporation. Mr. Baldwin stated that to his knowledge, Interpace had not recently mined in this area.

Memorandum: Joint site inspection with Interstate.

To: Frank W. Snell District Manager
A. Lowell Decker Area Manager
Sue Skinner District Geologist

From: George E. Campbell Physical Science Technician

On August 29th 1985, George Campbell, Mary Beth Martin and Sue Skinner of the Salt Lake District met with Ron Baldwin of Interstate Brick and several field representatives from the Utah State Division of Oil Gas and Mining. This report summarizes this meeting and describes some of Interstates operations visited by this group.

Jack Rabbit and Clay Research claims

This area is known as the Jim Gay mine. The disturbance is located just west of Utah highway 88 and Utah Lake (see attached maps). Total surface disturbance on federal and private ground is 20-25 acres. This operation may require a plan of operation. The eastern most pit at this site is private surface federal mineral. The other major pit is federal surface and minerals. The clay shales present at the Jim Gay area are grey and brown. The grey clay is primarily pyrophyllite $AlSi_2O_5(OH)$. Pyrophyllite is found in quartz veins, granites and metamorphic rocks. Pyrophyllite is rare in shale deposits such as the Manning Canyon at the Jim Gay site. The source of the pyrophyllite in these clays is a matter of some dispute. Theories of origin include hydrothermal alteration or low grade diagenetic metamorphism. The pyrophyllite in the grey clay exhibits an extremely high pyrometric cone equivalent value of 19-20. This high refractory value creates some difficulty and adds to the cost of using this clay in normal brickmaking. Long before Interstate obtained these claims, Geneva Steel utilized these clays for refractory. The brown clay has a lower pyrophyllite content than the grey clay. Other brown clay constituents include silica and kaolinite. The brown clay has a pyrometric cone equivalent value of 13-14. According to Mr. Baldwin at current mining rates a 4 and 1/2 year supply of brown clay and a 24 and 1/2 year supply of grey clay exists at the Jim Gay site. A smaller pit situated between the two larger pits has a rather large stockpile of abandoned used tires (500-600) at the bottom. A significant amount of vegetation is present in the western large pit. Lush cattails, tamarisk, reed grass and other associated grasses sedges and forbes are present. A small ponded area is in the upper northwest portion of the pit. There is a spring located approximately 40-50 feet above the base of this pond. Mr. Baldwin estimated that this pit has not been mined for at least 10-15 years. The geology of this area is complex, with many faults and folds observed. According to Mr. Baldwin Interstate probably will submit a patent application for this site.

Black Mine

This site is located north of the Jim Gay mine and approximately 3.1 miles west of Utah highway 68. The Black mine encompasses approximately 4 and 1/2 acres of disturbance. The mine consists of a large pit and several clay shale stockpiles. This clay is dark in color and is quite high in organic matter. This high organic content creates problems and adds to the costs involved in brickmaking. According to Mr. Baldwin 1000 tons were removed from the Black mine this year just to keep a state lease covering this site active. He also stated that because of the low quality of material at this site, he is trying to convince Interstate management to drop the lease and reclaim the site. This operation appears to be on state ground.

Powell Mine

This mine is located approximately 1.2 miles west of Utah highway 68 and 6.0 miles north of the Black mine turnoff. The Powell mine may be Interstates largest operation. This mine consists of several pits, some hillside cuts and several clay shale stockpiles. Mr. Baldwin estimated that there are 70,000 tons of clay shale present in the stockpiles. Although some pyrophillite is present in the clays at this pit, the content is not nearly as high as at the Jim Gay site. The pyrometric cone equivalent of the clays at the Powell mine is 8-9. A very large pit at the southern end of this property has been used by some local residents as a garbage dump. There are 800-1,000 used tires, assorted barrels, scrap, household and industrial (?) wastes in this pit. Since there is no locked access gate and Interstate does not routinely have personnel on site, this activity is difficult to control. This site appears to be on state ground.

INTERSTATE / BLM / STATE DOGM
Joint Meeting 8/29/85

Sue Skinner	BLM geologist 524-6801
George Campbell	BLM geologist 524-6790
Wayne Hedberg	DOGM hydrologist 538-5340
Mary Beth Martin	BLM geologist 524-6785
Dave Hooper	DOGM hydrologist 538-5340
Dave Wham	DOGM hydrologist 538-5340
Lynn Kunzler	DOGM biologist 538-5340
James Leatherwood	DOGM soil sceintist 538-5340
Ron Baldwin	Interstate Brick 561-1471

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Paragraph 2

Interstate Brick

M/049/005

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